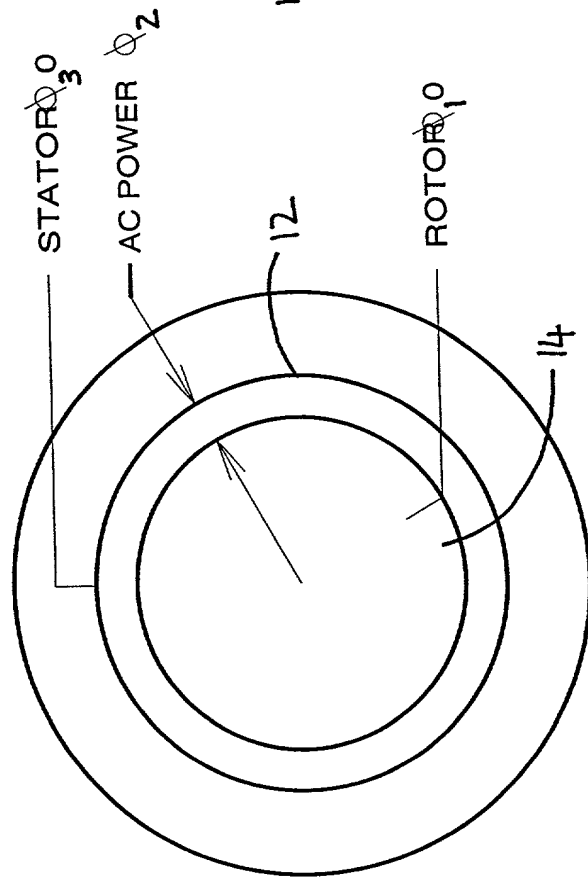


EXAMPLE OF ROTOR FLUX VECTOR DIRECTION CALCULATION

CASE: AC POWER ϕ_2 60
ROTOR ϕ_1 ANGLE 150

RESULT:
 $60 - 150 = -90$



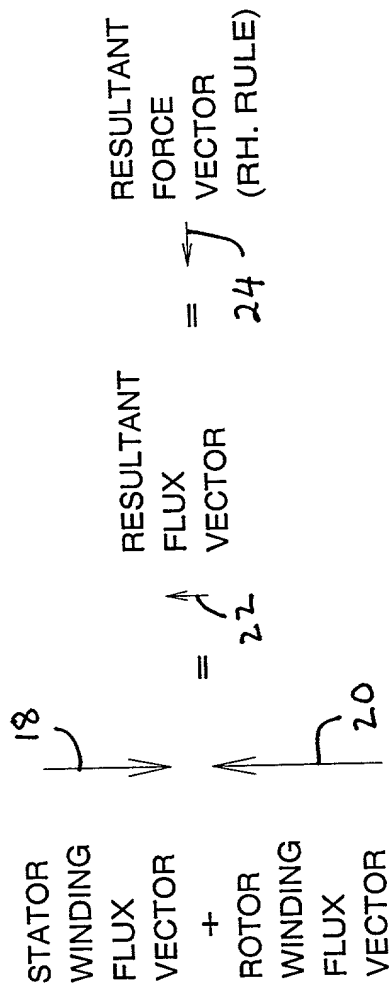
ROTOR FLUX VECTOR MUST POINT AT -90 DEGREES TO REMAIN IN PHASE-LOCK

ALL NUMBERS IN DEGREES

Fig. 1

EXAMPLE OF ROTOR FLUX VECTOR MAGNITUDE CALCULATION

CASE:
STATOR WINDING FLUX VECTOR MAGNITUDE 3 UNITS
ROTOR WINDING FLUX VECTOR MAGNITUDE 4 UNITS



ROTOR WILL ACCELERATE COUNTERCLOCKWISE

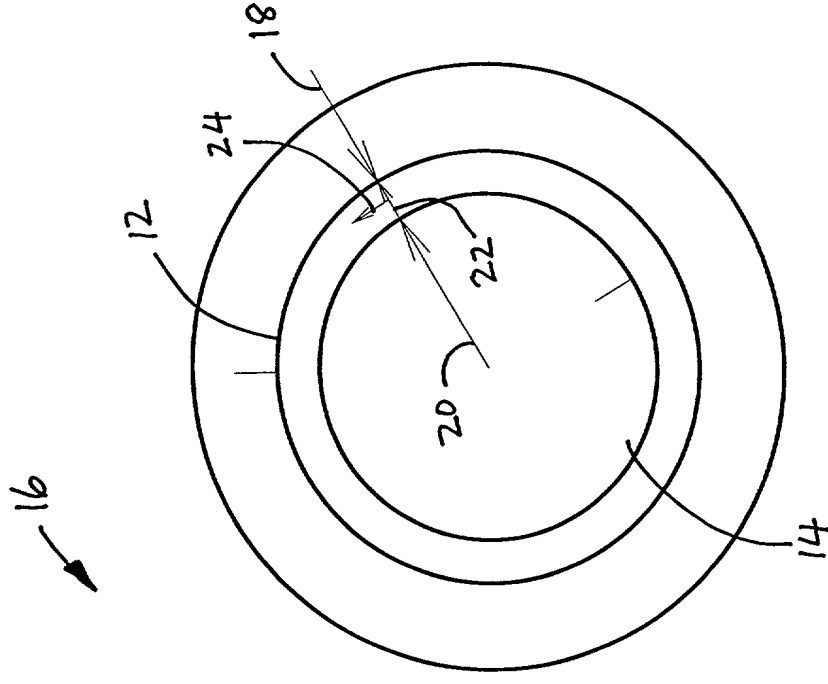
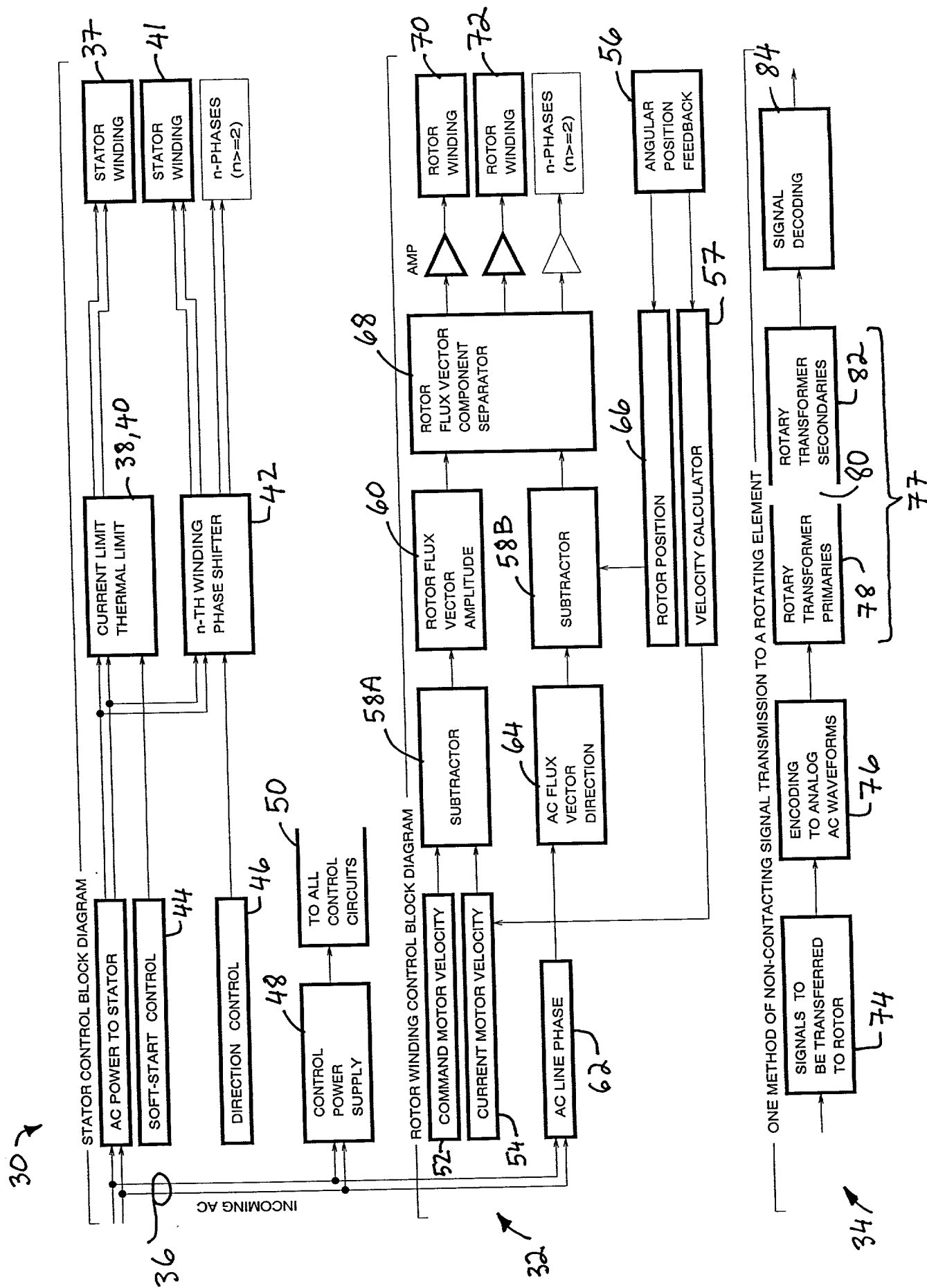


FIG. 2



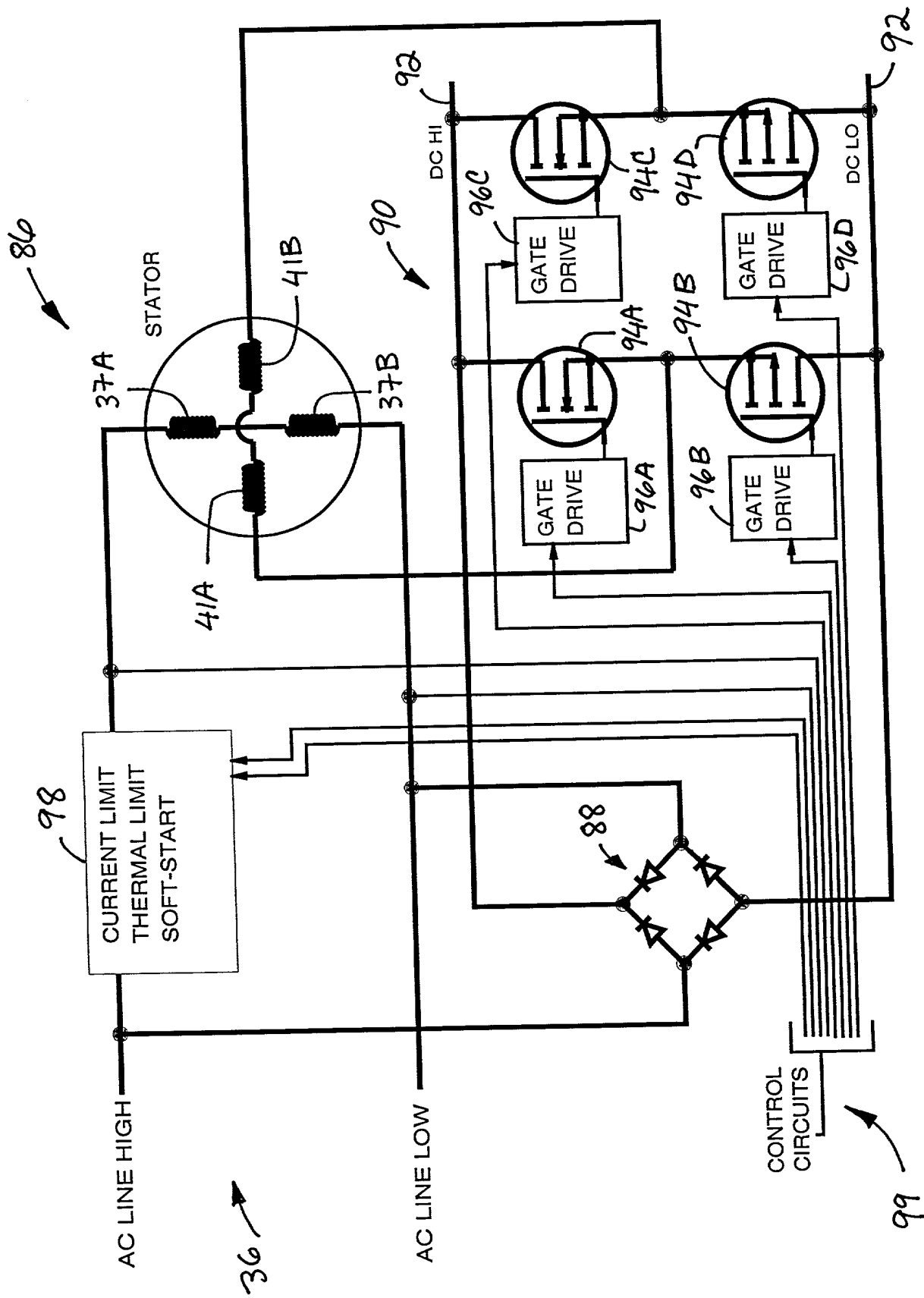


FIG. 5

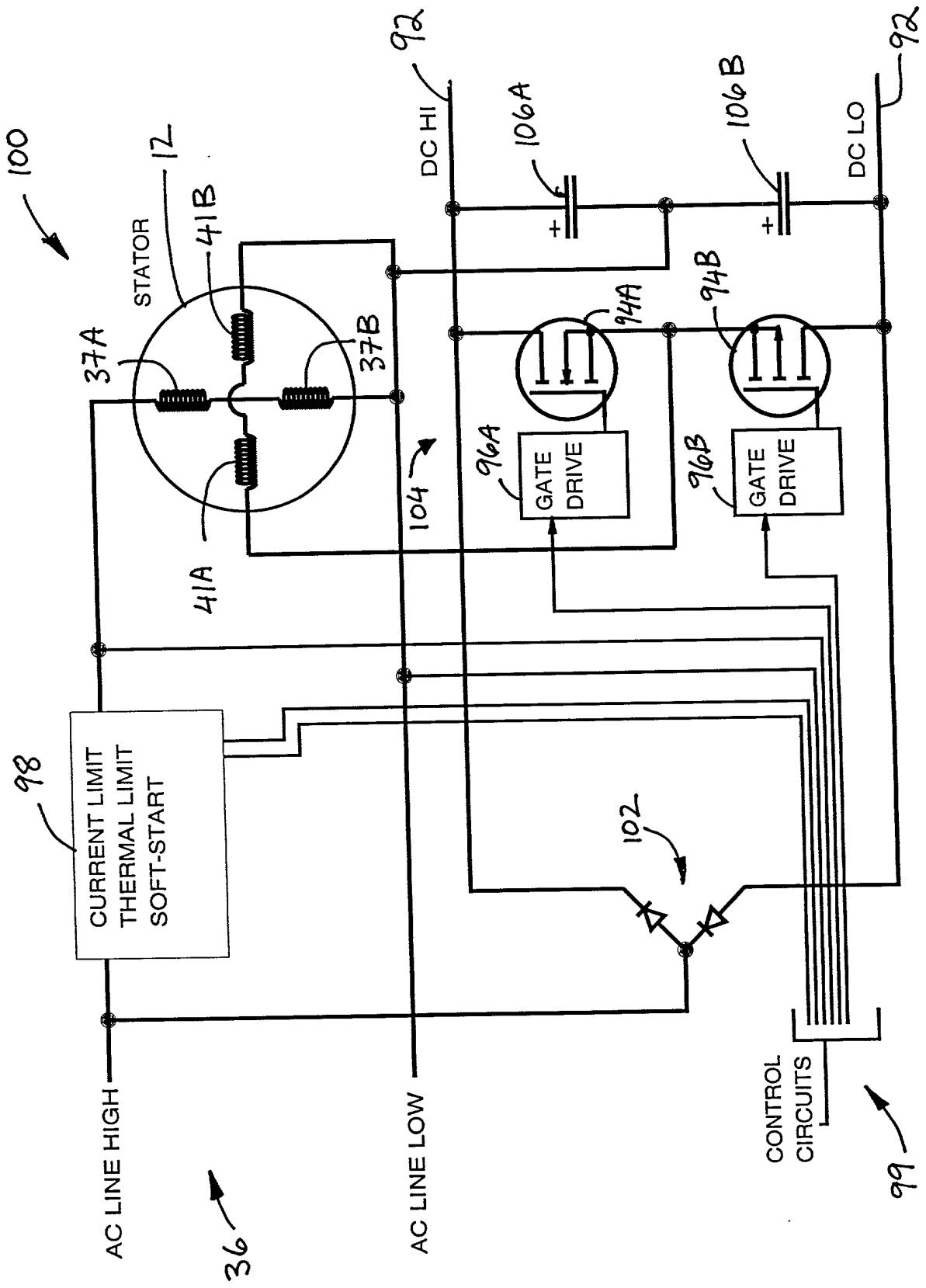


FIG. 6

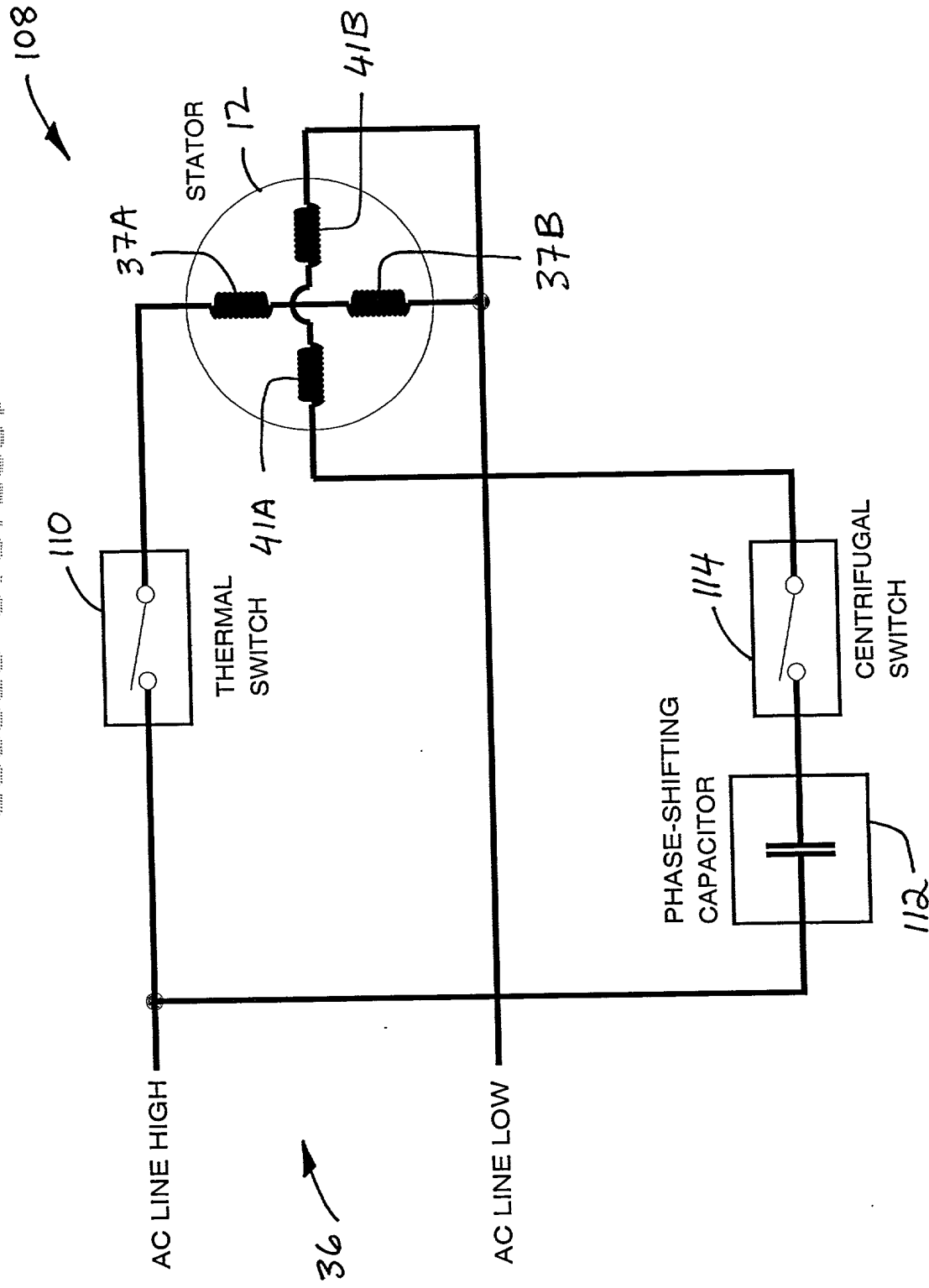


FIG. 7

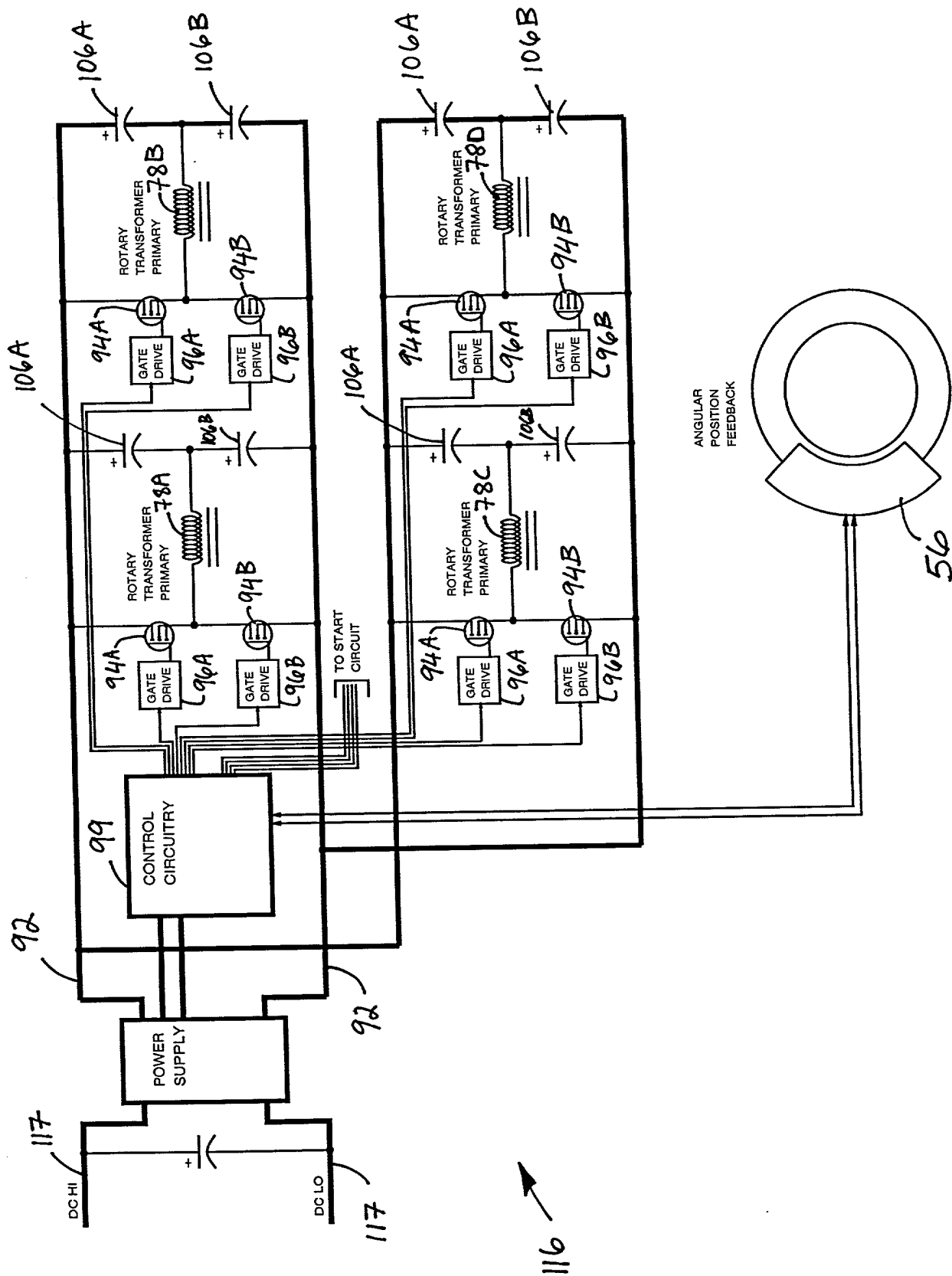
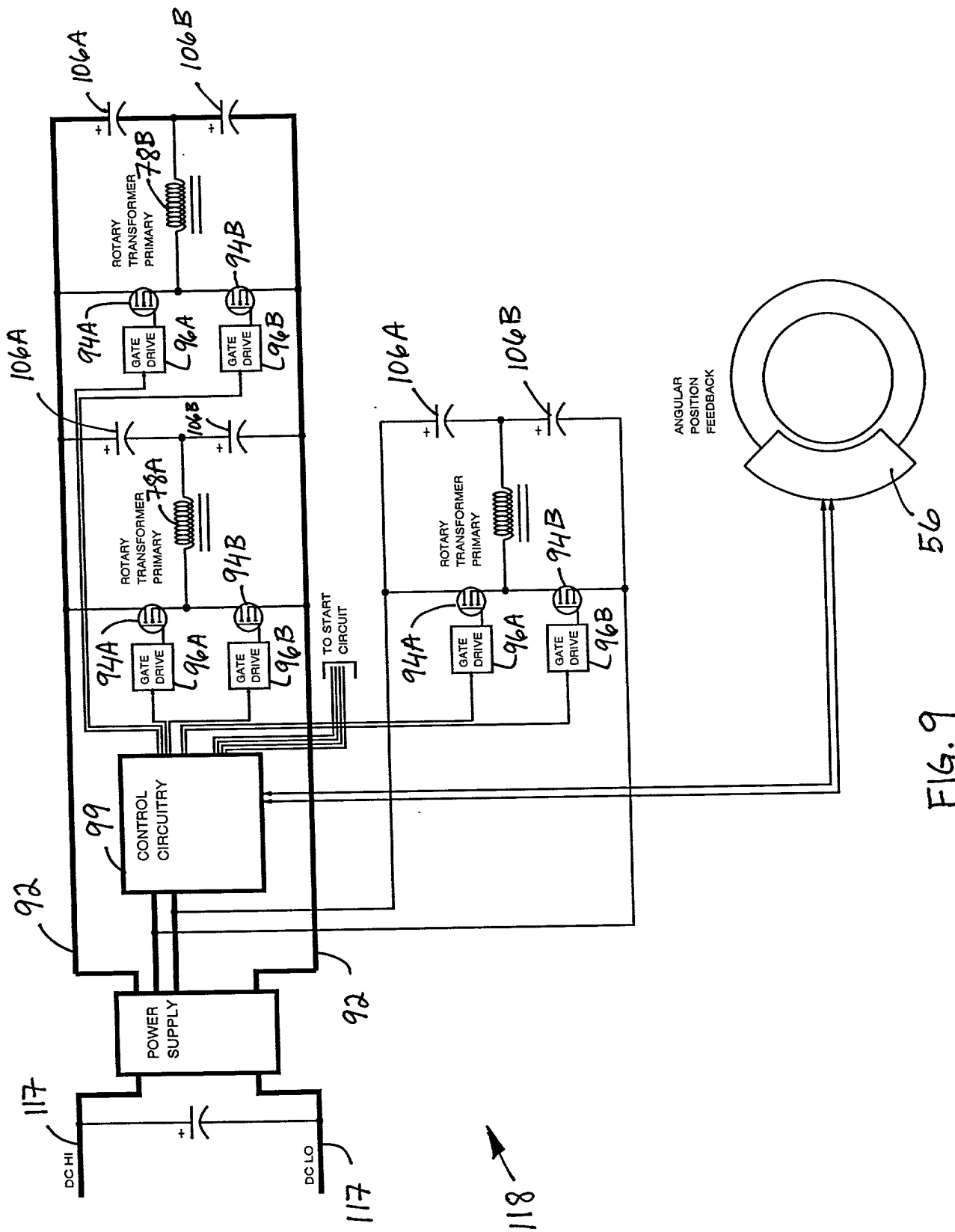


FIG. 8



120

A hand-drawn diagram of a staircase with 12 steps. A bracket on the left side of the steps is labeled '122'.

12-4

A vertical line drawing of a staircase with 12 steps. The steps are represented by horizontal lines of varying lengths, creating a jagged, ascending profile. At the top of the staircase, the number '12-6' is written, with a small arrow pointing to the top edge of the final step.

THREE-TRANSFORMER DRIVE TIMING DIAGRAM

FIG. 10

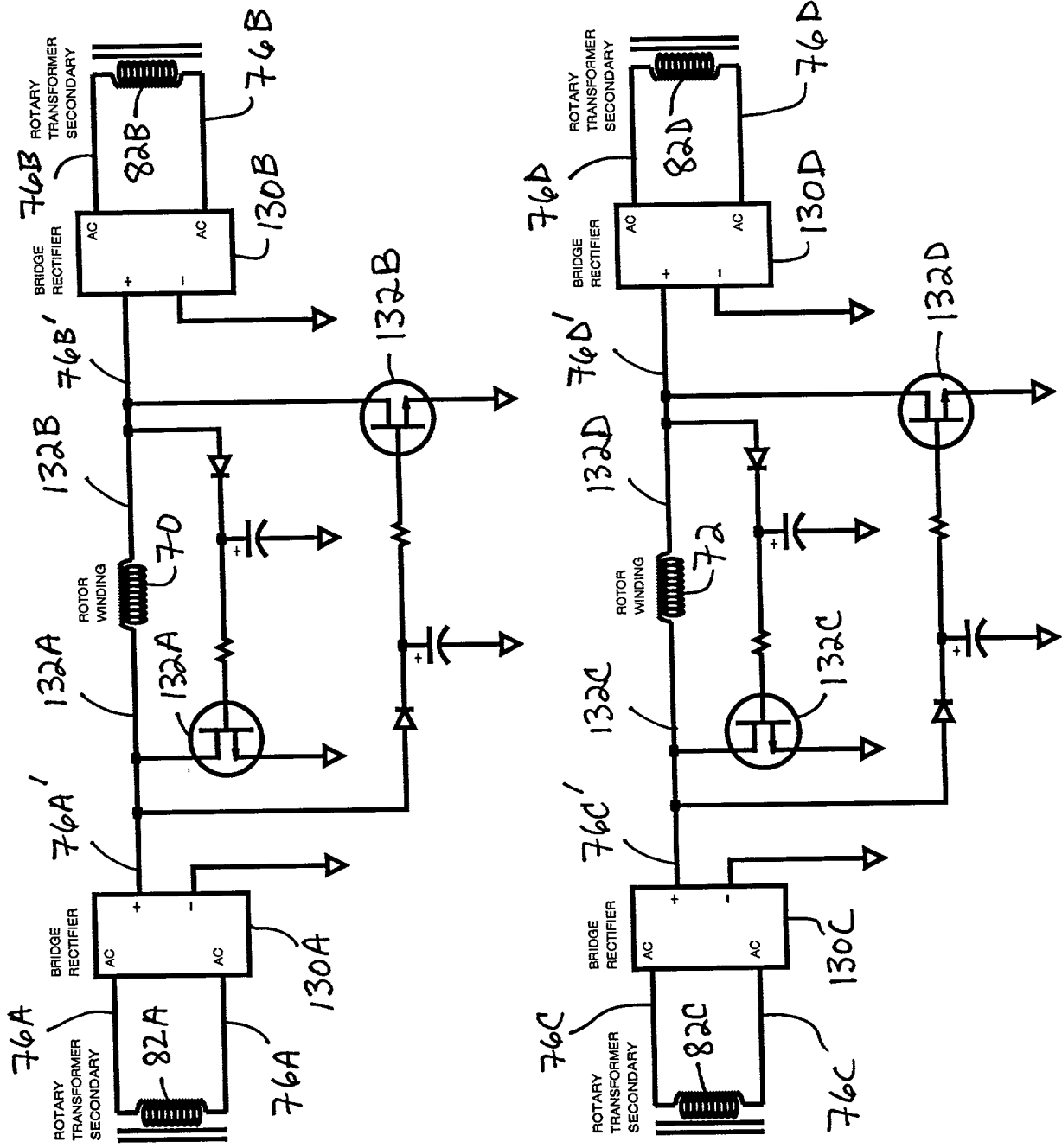


FIG. 11

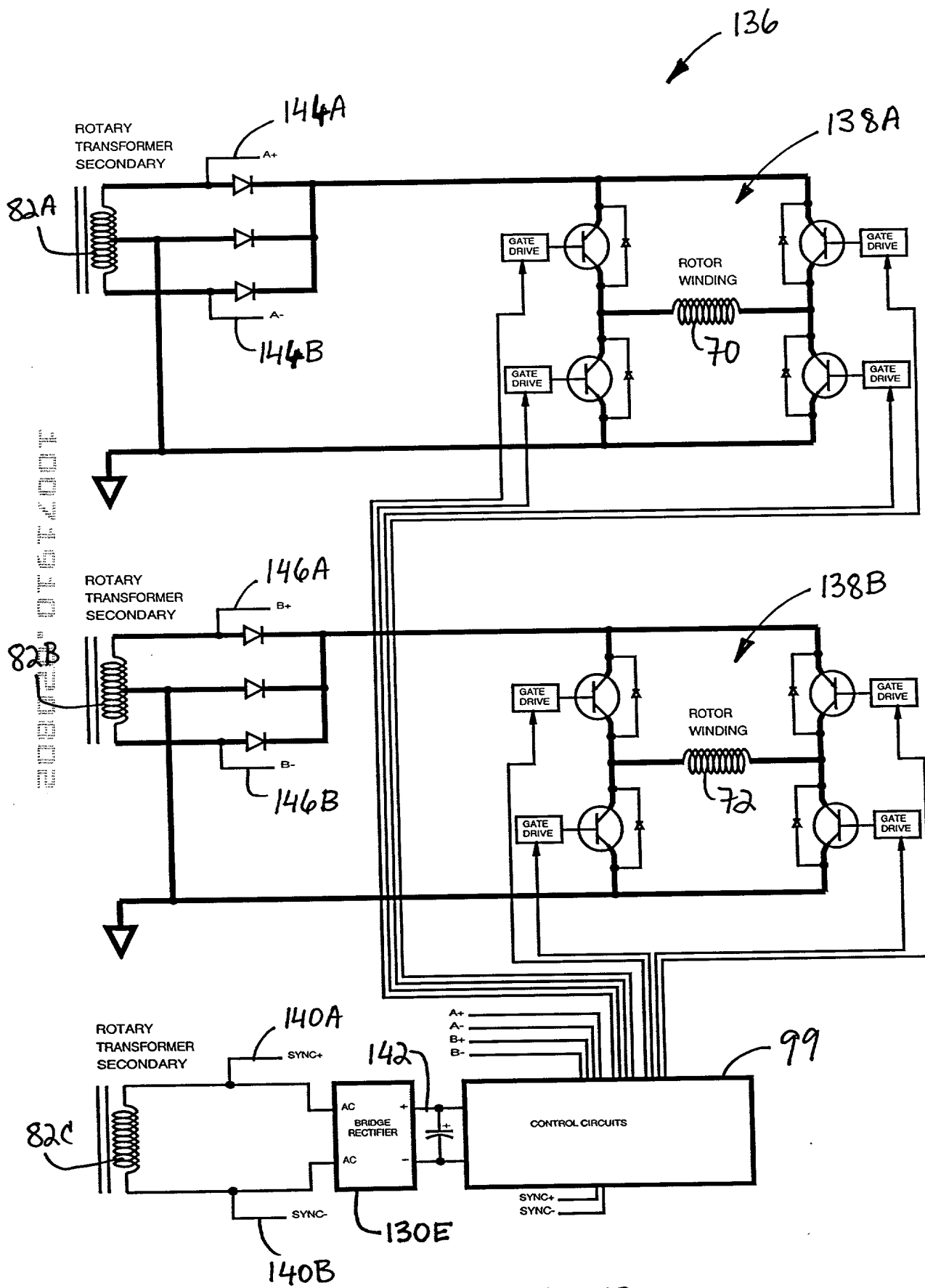


FIG. 12

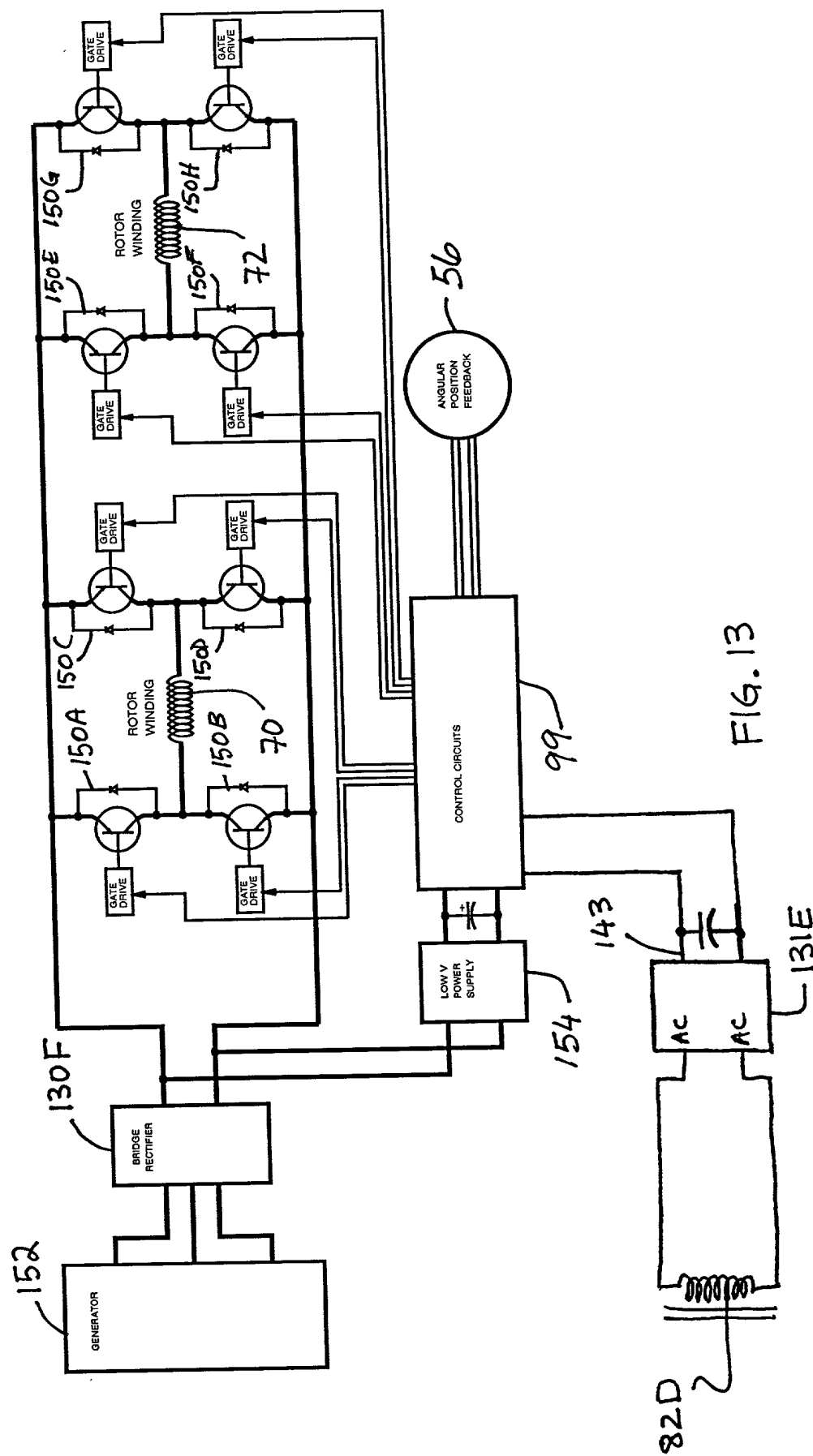
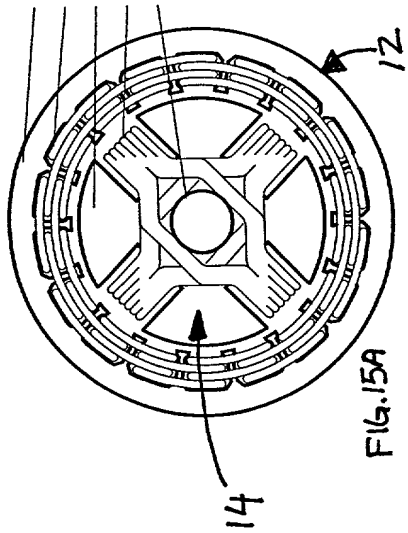
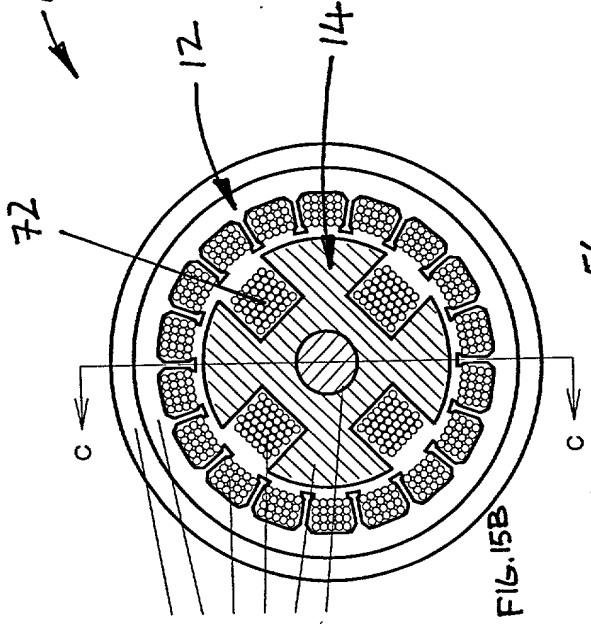


Fig. 13

176



176



168
162
170
160
158

164
168
37
70
170
158

164 160 168 70

56

176

77B 77C 77D

158 77A

172

12

B

166 162 170

164 160 168 70

158 77A

172

12

B

166 162 170

164 160 168 70

158 77A

172

12

B

166 162 170

164 160 168 70

158 77A

172

12

B

166 162 170

164 160 168 70

158 77A

172

12

B

166 162 170

164 160 168 70

158 77A

172

12

B

166 162 170

164 160 168 70

158 77A

172

12

B

166 162 170

164 160 168 70

158 77A

172

12

B

166 162 170

164 160 168 70

158 77A

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166 162 170

164 160 168 70

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164 160 168 70

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12

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166 162 170

164 160 168 70

158 77A

172

12

B

166 162 170

164 160 168 70

158 77A

172

12

B

166 162 170

164 160 168 70

158 77A

172

12

B

166 162 170

164 160 168 70

158 77A

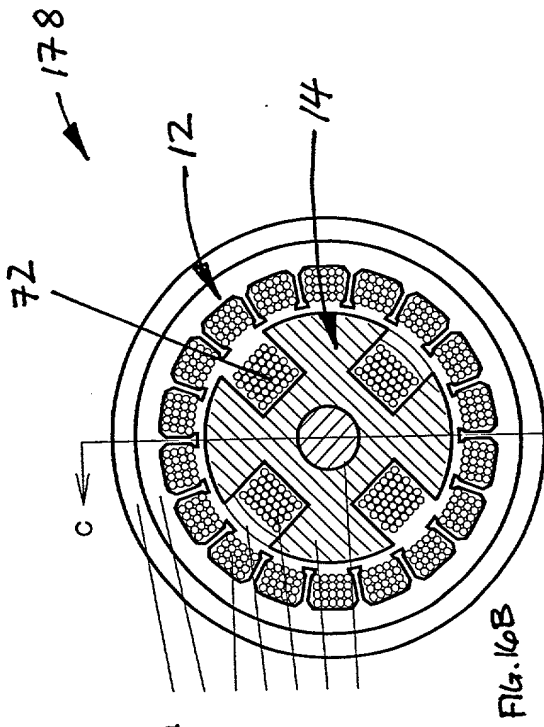
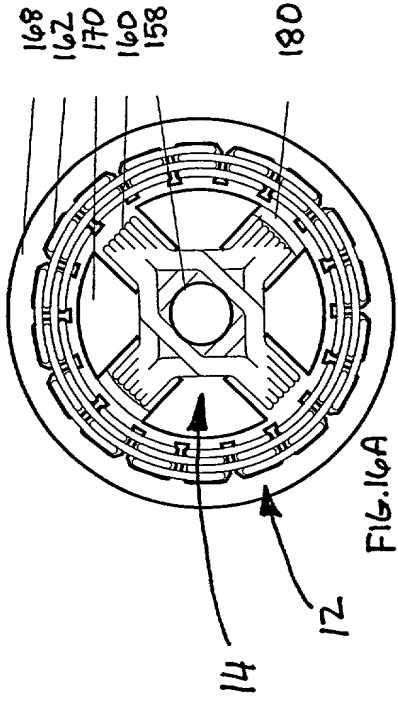
172

12

B

166

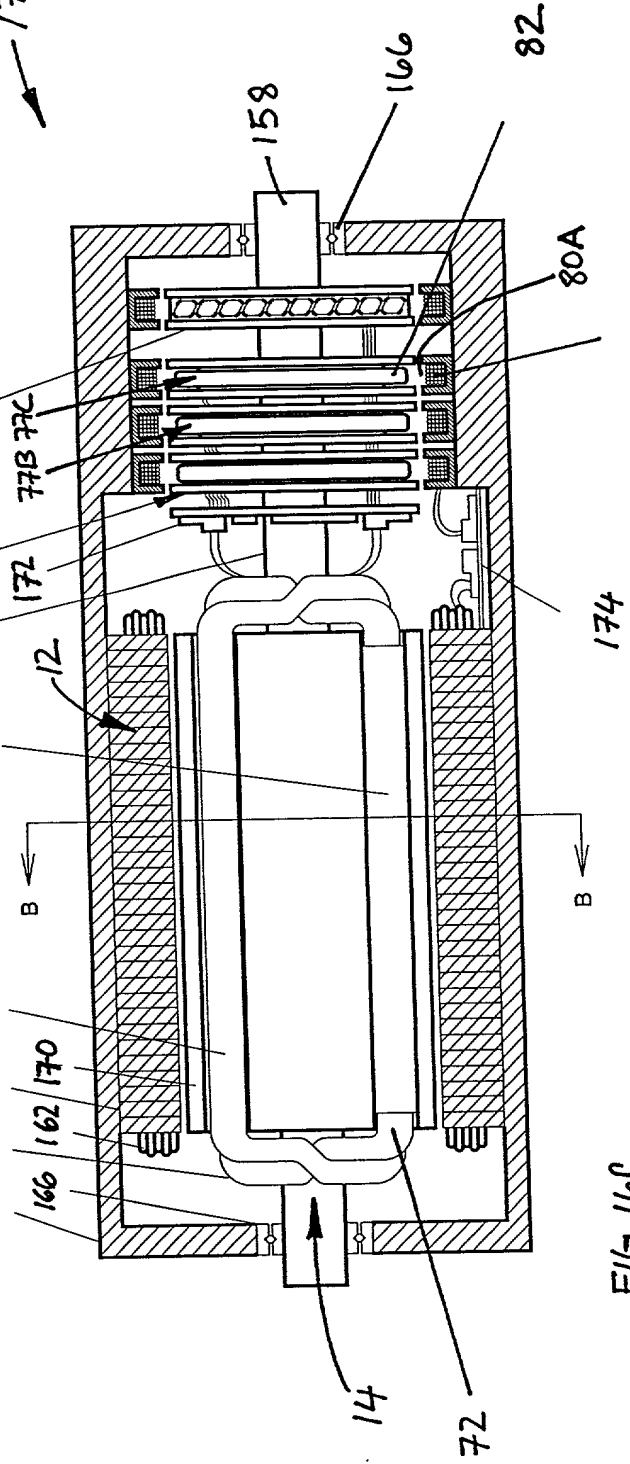
178



164 160 168 70

180 158 77A 56

178



78

182

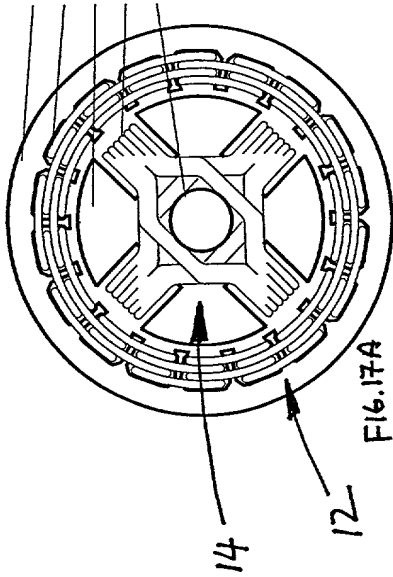


FIG. 17A

168
162
170
160
158

164
168
37
70
170
158

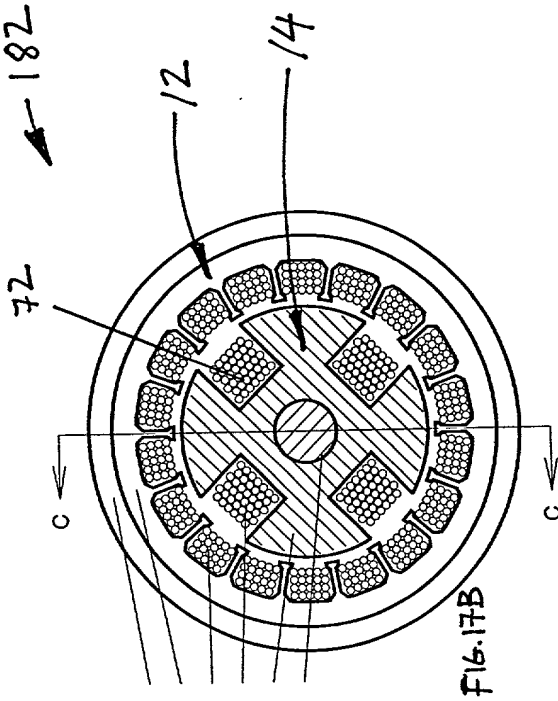


FIG. 17B

182

164 160 168 70

166 162 170

172

158 77A 184 56

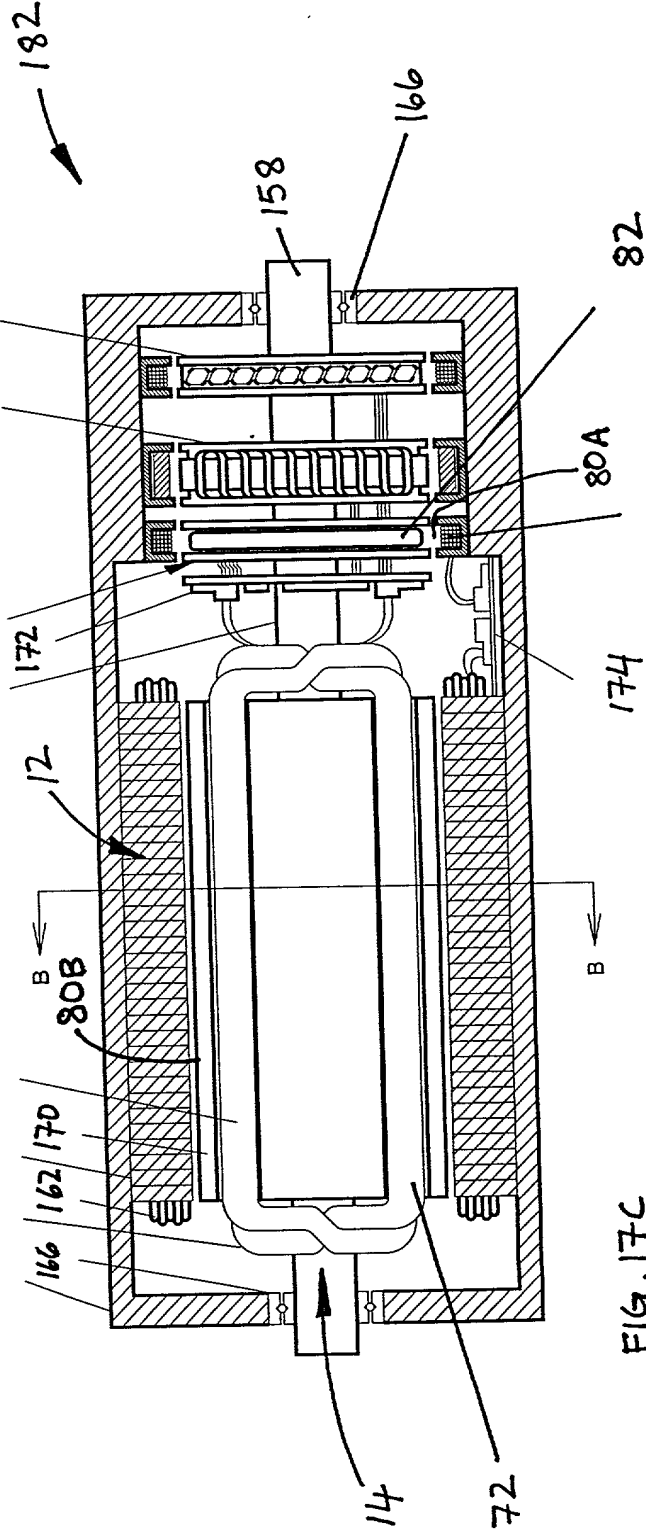


FIG. 17C

77

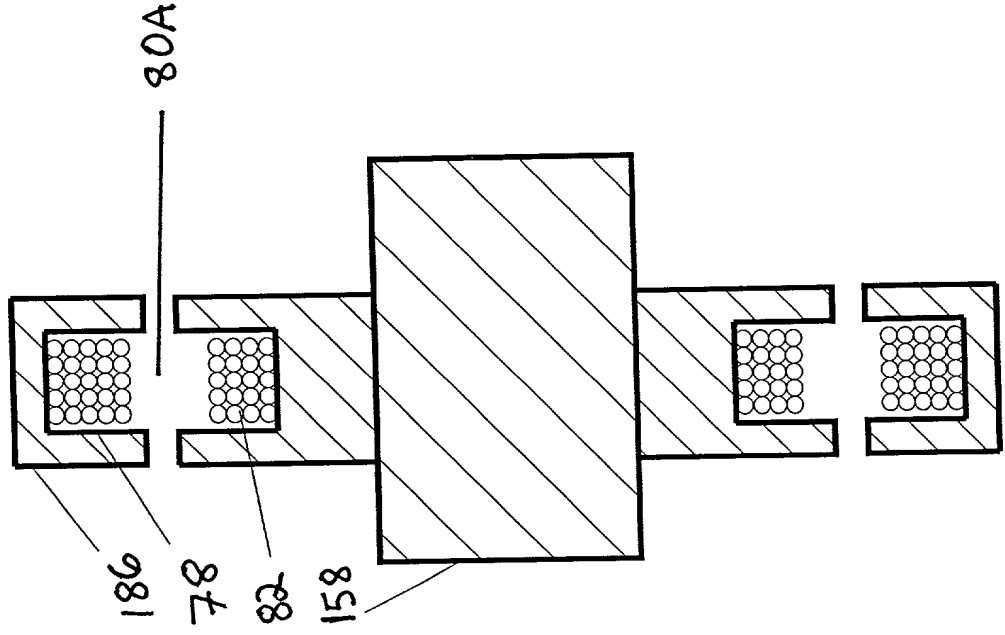


FIG. 18A

80C

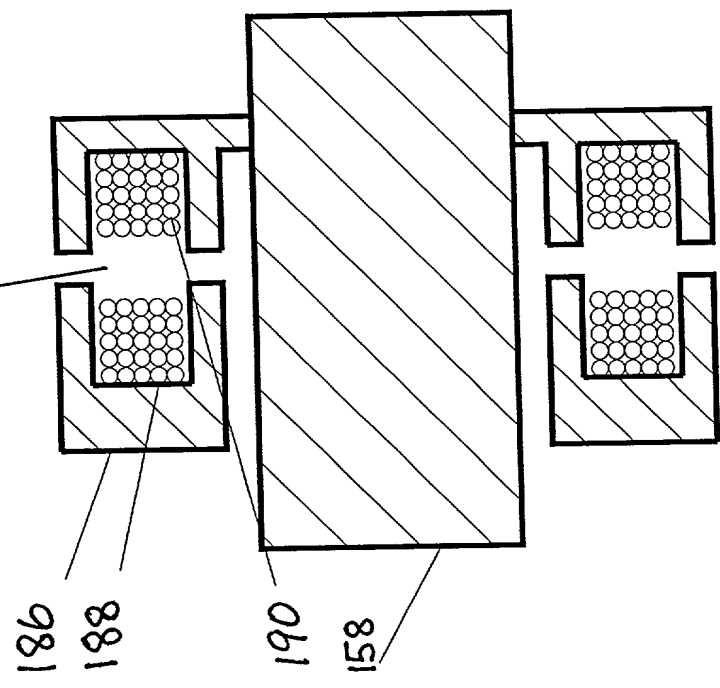


FIG. 18B